SUBMISSION UNDER MPEP 609 D

Page 1 of 3

Application Number	Not Assigned .
Filing Date	10 December 2001
First Named Inventor	DARROW
Group Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	ORT-1552

10/015989 10/015989 12/10/01

U.S. PATENT DOCUMENTS

Examiner	Cite	Cite Name of Patentee or Applicant	U.S. Patent Docum	U.S. Patent Document		
Initials	No.1	of Cited Document	Number	Kind Code ² (if known)	Pages, Columns, Lines, where relevant passages or relevant figures appear	
	-	Bang et al.	US 4,992,373			
_		Bang et al.	US 5,196,322			
(Forster et al.	US 5,200,340			
\		Van Eckelen et al.	US 5,217,878			
		Gerlitz et al.	US 5,270,178			
-	-	Samalet al	US 5,278,062			
-		Berg-et-al-	US 5,326,700 -	-		
	-	Mosher et al.	US-5,342,762			
		Lavallie, Edward R.	US 5,665,566:			
		Comb et al.	US 5,834,247			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.1	Name of Patentee or Applicant of Cited Document	Office	reign Patent Document Number* KindCodes	Pages, Columns, Lines, where relevant passages or relevant figures appear	T ⁶
		SmithKline Beecham PLC	PCT	EP 0887414		
		Boehringer Mannheim	PCT	WO 97/		
	<i>i/</i>	GmbH		47737		
		Symbiosis Conetics, Inc.	PCT	WO 98/		
	V			49326		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.1	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	L3		
	-	Altschul et al., (1990) Dasic Local Alignment.			
	I Ausubel and M Frederick, "Short Protocols in Molecular Biology", Molecular biology-Laboratory Manuals (1997).				
_		<u>Chen</u> et al., "Expression and Activity-Dependent Changes of a Novel Limbic- Serine Protease Gene in the Hippocampus", J. Neurosci. (1995) 15: 5088-5097.			
		Pavia et al. "The Coagulation Cascade: Initiation, Maintenance, and Regulation.", Biochemistry (1991) 30:10363-10370			
		Hansson et al., "Cloning, Expression, and Characterization of Stratum Corneum Chymotryptic Enzyme: A Skin-Specific Human Serine Proteinase", J. Biol. Chem. (1994) 269:19420-19426.			
		R. Huber and W. Bode, "Structural Basis of the Activation and Action of Trypsin", Acc. Chem. Res. (1978) 11:114-122.			
	V	Inoue et al., "Cloning and Tissue Distribution of a Novel Serine Protease Esp- 1 from Human Eosinophils", Biochem. Biophys. Res. Commun. (1998) 252:307- 312.			

Examiner	FF1 11 1.11	Date	2011
Signature	Walley !!	//UTTU Considered	>1/4/2010 2005

SUBMISSION UNDER MPEP 609 D Page 2 of 3 Application Number | Not Assigned | First Named Inventor | DARROW | Attorney Docket Number | ORT-1552

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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Examiner Initials*	Cite No.1	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	L3
Uwm		Ishii et al., "Kinetics of Thrombin Receptor Cleavage on Intact Cells. Relation to Signaling", J. Biol. Chem. (1993) 268:9780-9786.	
ww		Kossiakoff et al., "Structure of Bovine Trypsinogen at 1.9 .ang. Resolution", Biochemistry (1977) 16:654-664.	
awan	V	S. Kühn and P. F. Zipfel, "The Baculovirus Expression Vector pBSV-8His Directs Secretion of Histidine-Tagged Proteins", Gene (1995) 12:225-229.	
Mou		J. Kyte and R. F. Doolittle, "A Simple Method for Displaying the Hydropathic Character of a Protein", J. Mol. Biol. (1982) 157:105-132.	
Celule		<u>Leytus</u> et al., "A Novel Trypsin-Like Serine Protease (Hepsin) with a Putative Transmembrane Domain Expressed by Human Liver and Hepatoma Cells", <i>Biochemistry</i> (1988) 27:1067-1074.	
urvu		<u>Little</u> et al., "Zyme, A Novel and Potentially Amyloidogenic Enzyme cDNA Isolated from Alzheimer's Disease Brain", J. Biol. Chem. (1997) 272:25135-25142.	
WWM		B. Martoglio and R. Dobberstein, "Signal Sequences: More Than Just Greasy Peptides", Trends Cell Biol. (1998) 8:410-415.	
won		Matthews et al., "Three-Dimensional Structure of Tosylalpha Chymotrypsin", Nature (London) (1967) 214:652-656.	
Or Mi	/	Nelson et al., "Molecular Cloning and Characterization of Prostase, An Androgen-Regulated Serine Protease with Prostate-Restricted Expression", P. N. A. S. USA (1999) 96:3114-3119.	
ware	,	W. R. Pearson and D. J. Lipman, "Improved Tools for Biological Sequence Comparison", P. N. A. S. USA (1988) 85:2444-2448.	
WWW		Pham et al., "Production of Fully Active Recombinant Murine Granzymen B in Yeast", J. Biol. Chem. (1988) 273(3):1629-1698.	
WWW		D. Proud and A. P. Kaplan, "Kinin Formation: Mechanisms and Role in Inflammatory Disorders", Ann. Rev. Immunol. (1988) 6:49-83.	
NWM	•	N. D. Rawlings and A. J. Barrett, "Families of Serine Peptidases", Methods Enzymol. (1994) 244:19-61.	
WWW		K. B. M. Reid and R. R. Porter, "The Proteolytic Activation Systems of Complement", Ann. Rev. Biochem. (1981) 50:433-464.	
		Sambrook et al., Molecular Cloning: A Laboratory Manual, 2nd Ed. (Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. (1989))	
[UWM		Sherman et al., "Identification of Tissue-type Plasminogen Activator-specific Plasminogen Activator Inhibitor-1 Mutants", J. Biol. Chem. (1995) 270(16):9301-9306.	
MOM		Stroud et al., "Structure of Bovine Trypsin: Electron Density Maps of the Inhibited Enzyme at 5 .ang. and 2.7 .ang. Resolution", J. Mol. Biol. (1974) 83:185-208.	

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SUBMISSION UNDER MPEP 609 D	First Named Inventor	DARROW .
Page 3 of 3	Attorney Docket Number	ORT-1552

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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MUM	-	K. Tachias and E. L. Madison, "Converting Tissue-Type Plasminogen Activator into a Zymogen", J. Biol. Chem. (1996) 271:28749-28752.	
1km-		<u>Takayama</u> et al., "Characterization of the Precursor of Prostate-Specific Antigen Activation by Trypsin and by Human Glandular Kallikrein", J. Biol. Chem. (1997) 272:21582-21588.	
luon		Wang et al., "Production of Active Recombinant Human Chymase from a Construct Containing the Enterokinase Cleavage Site of Trypsinogen in Place of the Native Propeptide Sequence", Biol. Chem. Hoppe-Seyler (1995) 376:681-684.	
low	. i/	Yamashiro et al., "Molecular Cloning of a Novel Trypsin-Like Serine Protease (Neurosin) Preferentially Expressed in Brain", Biochim. Biophys. Acta (1997) 1350:11-14.	
PRITA	1	Yoshida et al., "Sequence Analysis and Expression of Human Neuropsin cDNA and Gene.", Gene (1998) 213:9-16.	
WM	V	Noshida et al., "cDNA Cloning and Expression of a Novel Serine Protease, TLSP1", Biochim. Biophys. Acta (1998) 1399:225-228.	
WKom	. 0	Yu et al., "Molecular Cloning: Tissue Specific Expression and Cellular Localization of Human Prostasin mRNA", J. Bio. Chem. (1995) 270(22): 13483-13489.	
WWM	V	<u>Yu</u> et al., "Prostasin is a Novel Human Serine Proteinase from Seminal Fluid: Purification, Tissue Distribution and Localization in Prostate Gland", J. Biol. Chem. (1994) 269:18843-8.	

Examiner Signature	[///	MMAIL-	Myou	Date Considered	5 Manh	2005

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Application Number	10/015,989
Filing Date	10 December 2001
First Named Inventor	DARROW
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	U.S. PATENT DOCUMENTS							
Examine r Initials	Cite No.	U.S. Patent	Document Kind Code ^a (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	CUSS/Subclass, Pages, Columns, Lines, where-relevant passages or relevant figures appear		
www		4,992,373		Bang et al.	02-12-1991	435/226		
İ		5,196,322		Bang et al.	03-23-1993	435/69.7		
		5,200,340		Forster et al.	04-06-1993	424/94.64		
		5,217,878		Van Eekelen et al.	06-08-1993	435/69.1		
		5,270,178		Gerlitz et al.	12-14-1993	435/69.1		
		5,278,062		Samal et al.	01-11-1994	435/223		
		5,326,700		Berg et al.	07-05-1994	435/240		
		5,342,762		Mosher et al.	08-30-1994	435/69.3		
		5,665,566		Lavallie, Edward R.	09-09-1997	435 1893		
		5,834,247		Comb et al.	11-10-1998	435/697		
V		5,726,038	Α	Christiansen	03-10-1998	435/69.1		
WIN		5,504,001	Α	Foster	04-02-1996	435/219		

					REIGN PATENT DOCUMENTS			
Examine	Cite	Foreig	n Patent Docum		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, where relevant passages or	T⁰
r Initials	No.		1	-	•	mm-dd-yyyy	relevant figures appear	
Wim		EP	0887414		SmithKline Beecham PLC	12-30-1998		
www		wo	97/47737		Boehringer Mannheim GmbH	12-18-1997		
wan	,	wo	98/49326		Symbiosis Genetics, Inc.	11-05-1998		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
		ALTSCHUL ET AL., (1990) Basic Local Alignment.	
	-	h-AUSUBEL-AND M. FREDERICK, "Short-Protecolo in Molocular-Biology", Melocular-biology-Enboratory Manuals (1997).	
118174		CHEN ET AL., "Expression and Activity-Dependent Changes of a Novel Limbic-Serine Protease Gene in the Hippocampus", J. Neurosci. (1995) 15: 5088-5097.	
www		DAVIE ET AL., "The Coagulation Cascade: Initiation, Maintenance, and Regulation.", Biochemistry (1991) 30:10363-10370	
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1 Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-lettercode (WIPO Standard ST.3), 4 For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbots as indicated on the document under WIPO Standard ST. 16 if possible, 6 Applicant is to place a check mark here if English language Translation is attached.

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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
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Num		HANSSON ET AL., "Cloning, Expression, and Characterization of Stratum Corneum Chymotryptic Enzyme: A Skin-Specific Human Serine Proteinase", <i>J. Biol. Chem.</i> (1994) 269:19420-19426.	
mm	-	R. HUBER AND W. BODE, "Structural Basis of the Activation and Action of Trypsin", Acc. Chem. Res. (1978) 11:114-122.	
WON	L	INOUE ET AL., "Cloning and Tissue Distribution of a Novel Serine Protease Esp-1 from Human Eosinophils", Biochem. Biophys. Res. Commun. (1998) 252:307-312.	
lewson		J. KYTE AND R. F. DOOLITTLE, "A Simple Method for Displaying the Hydropathic Character of a Protein", J. Mol. Biol. (1982) 157:105-132.	
		LEYTUS ET AL., "A.Novel Trypsin-Like Serine Proteose (Hepsin) with a Putative Transmembrane Domain Expressed by Human Liver and Hepatoma Cells", <i>Biochemistry</i> (1988) 27:1067-1074.	
		LITTLE ET AL., "Zyme, A Novel and Potentially Amyloidogenic Enzyme cDNA Isolated from Alzheimer's Disease Brain", J. Biol. Chem. (1997) 272:25135-25142.	
		B. MARTOCLIO AND R. DOBBERSTEIN, "Signal Sequences: More Than Just Greasy Peptides", Trends Cell Biol. (1998) 8:410-415.	
		MATTHEWS ET AL., "Three Dimensional Structure of Teeyl alpha. Chymotrypsin", Nature (London) (1967) 214:652-656.	
0		NELSON ET AL., "Molecular Cloning and Characterization of Prostase, An Androgen-Regulated Serine Protease with Prostate-Restricted Expression", P. N. A. S. USA (1999) 96:3114-3119.	
		W. R. PEARSON AND D. J. LIPMAN, "Improved-Tools for Biological Sequence Comparison", P. N. A. S. USA (1988) 85:2444-2448.	
		PHAM ET AL., Production of Fully Active Recombinant Murine Granzymen B in Yeast, J. Biol. Ghem. (1988) 273(3):1629-1698.	
		D. PROUD AND A. P. KAPLAN, "Kinin Formation: Mechanisms and Role in Inflammatory Disorders", Ann. Rev. Immunol. (1988) 6:49-83.	
		N. D. RAWLINGS AND A. J. BARRETT, "Families of Serine Peptidases", Methods Enzymol. (1994) 244:19-61.	
		K. B. M. REID AND R. R. PORTER, "The Protectytic Activation Systems of Complement", Ann. Rev. Biochem. (1981) 50:433-464.	
-		SAMBROOK ET AL, Melecular Clening: A Laboratory Manual, 2 rd Ed. (Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. (1989)).	
•		SHERMAN ET AL., "Identification of Ticcus type Plasminogen Activator specific Plasminogen Activator Inhibitor-1 Mutants", J. Biol. Chem. (1995) 270(16):9301-9306.	٠
		STROUD ET AL., "Structure of Bovine Trypoin: Electron Bonsity Maps of the Inhibited Enzyme at 5 ang. and 2.7 ang. Resolution", J. Mol. Biol. (1974) 83:185-208.	
		.Kr TASHIAS AND E. L. MADISON, "Converting Tissue-Type Plasminegen Activator Into a Zymogen", J. Biol. Chem. (1996) 271:28749-28752.	
		TAKAYAMA ET Al., "Gheracterization of the Procursor of Prestate Specific Antigon Activation by Trypein and by Human Glandular Kallikrein", J. Biol. Chem. (1997) 272:21582-21588.	
		WANG-ET AL., "Production of Active Recombinant Human Chymase from a Construct Containing the Enterokinase Cleavage Site of Trypsinogen-in-Place of the Native Propertide Sequence", Biol. Chem. Hoppe-Seyler (1995) 376:681-684.	
		YAMASHIRO ET AL., "Molocular Cloning of a Novel Trypsin-Like Sorine Protesse (Neurosin) Proferentially- Expressed in Brain", Biochim. Biophys. Acta (1997) 1350:11-14.	
		WOSHIDA ET Al, "Sequence Analysis and Expression of Human Neuropein eDNA and Gone,", Gene (1998) 213:9-16.	
		YOSHIDA ET AL., "eDNA Cloning and Expression of a Novel Serine Protease, TLSP1", Biochim. Biophys. Acta (1998) 1399:225-228.	
		YU ET AL., "Molecular Gloning: Tissus Specific Expression and Gollular Localization of Human Prostasin mRNA", J. Bio. Chem. (1995) 270(22); 13483-13489.	
		VLLET AL., "Proetsein is a Nevel Human Serine Proteinase from Seminal Fluid: Purification, Tissue Distribution and Localization in Prostate Gland", J. Biol. Chem. (1994) 269:18843-8.	

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